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BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

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JNANA BHARATHI
BANGALORE - 560 056

BUB/CTE/2014-15/

Date: 18-03-2015

TEST REPORT ON WET MIX MACADAM MIX
(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Improvements and Asphalting to Dhanalakshmi Layout Roads in Ward No.09 of Vidyaranyapure Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 16-03-2015

Sample supplied to lab by: Sri.R.Madhusudhan, Contractor, Bangalore.

Report required for: Assistant Executive Engineer, Vidyaranyapure Sub-Division. BBMP, Bangalore.

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, IV Revision-2001
53.00	**100.00**	100
45.00	**97.00**	95-100
26.50	**---**	-
22.40	**72.00**	60-80
11.20	**43.00**	40-60
4.75	**36.00**	25-40
2.36	**24.00**	15-30
0.600	**17.60**	8-22
0.075	**2.90**	0-8

*As Furnished by Client

The Results relate only to the items tested

Accepted

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ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ,
ಯಲಹಂಕ ವಲಯ,
ಬೃ. ಬೆ. ಮ ಪಾ., ಬೆಂಗಳೂರು-97

G.R. HARISH
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18/3/2015

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DEPARTMENT OF CIVIL ENGINEERING

Date: 18-03-2015

TABLE 12 :

SL No	Test conducted	Sample No	Results	Requirements as per IS:383-1970 & Test Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2007)
1	Flakiness & Elongation Index	01	**25.10%**	Not more than 30 %
2	Impact Value	----,,----	**24.70%**	Not more then 24.00 % for BC Not more then 27.00 % for DBM Not more then 30.00 % for BM/WMM

*As Furnished by Client

The Results relate only to the items tested.

DEPARTMENT OF CIVIL ENGINEERING BANGALORE UNIVERSITY

18/03/2015

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BUB/CTE/2014-15/

Date: 18-03-2015

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Improvements and Asphalting to Dhanalakshmi Layout Roads in Ward No.09 in Vidyaranyapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15/ dated 16-03-2015

Sample supplied to lab by: Sri.R,Madhusudhan, Contractor, Bangalore.

Report required for: Assistant Executive Engineer,
Vidyaranyapura Sub-Division.
BBMP, Bangalore.

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, IV Revision-2001
53.00	**100.00**	100
45.00	**96.50**	95-100
26.50	**---**	-
22.40	**77.00**	60-80
11.20	**52.00**	40-60
4.75	**37.00**	25-40
2.36	**25.10**	15-30
0.600	**19.30**	8-22
0.075	**4.90**	0-8

TABLE 1 2 :

SL No	Test conducted	Sample No	Results	Requirements as per IS:383-1970 & Test Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2007)
1	Flakiness & Elongation Index	01	**24.10%**	Not more than 30 %
2	Impact Value	----,,----	**25.30 %**	Not more then 24.00 % for BC Not more then 27.00 % for DBM Not more then 30.00 % for BM/WMM

*As Furnished by Client

The Results relate only to the items tested.

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BUB/CTE/2014-15/ **Date: 25-03-2015**

1. Bituminous Concrete.

Sub: Testing of Bitumen Premix Sample.
{Project*: Improvements and Asphalting to Dhanalakshmi Layout Roads in Ward No.09 of Vidyaranyapura Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 23-03-2015

Sample supplied to lab by: Sri.R.Madhusudhan, Contractor, Bangalore.

Report required for: Assistant Executive Engineer, Vidyaranyapura Sub-Division, BBMP, Bangalore.

A.Type of Construction: **Bituminous Concrete.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **6.04 %.**

2. Gradation Test

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-18 of MORTH Specfications-2001 BC (Grading – 2)
19.0	**100**	100
13.2	**92.10**	79-100
9.5	**82.00**	70-88
4.75	**62.40**	53-71
2.36	**49.50**	42-58
1.18	**38.50**	34-48
0.600	**30.70**	26-38
0.300	**19.80**	18-28
0.150	**15.00**	12-20
0.075	**5.50**	4-10

Note: * As furnished by Client.
The Results relate only to the items tested.

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BANGALORE UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING

Date: 25-03-2015

TABLE 12 :

SL No	Test conducted	Sample No	Results	Requirements as per IS:383-1970 & Test Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2007)
1	Flakiness & Elongation Index	01	**24.30%**	Not more than 30 %
2	Impact Value	----,,----	**23.40 %**	Not more then 24.00 % for BC Not more then 27.00 % for DBM Not more then 30.00 % for BM/WMM
3	Water absorption	----,,----	**0.40%**	Not more than 1.0 %
4	Stripping test. (Coating and stripping of Bitumen aggregate mixtures)	----,,----	**97.20 %**	Minimum retained coating 95.0 **%**

*As Furnished by Client

The Results relate only to the items tested.

DEPARTMENT OF CIVIL ENGINEERING ★ BANGALORE UNIVERSITY

25/03/2015

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BUB/CTE/2014-15/ Date: 25-03-2015

TEST REPORT ON BITUMINOUS MIXES
(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: Testing of Bitumen Premix Sample (Semi Dense Bituminous Concrete-SDBC).
{Project*: Improvements and Asphalting to Dhanalakshmi Layout Roads in Ward No.09 of Vidyaranyapure Sub-Division}

Ref.: Letter No. Testing/BUB/2014-15, dated 23-03-2015

Sample supplied to lab by: Sri.R.Madhusudhan, Contractor, Bangalore.

Report required for: Assistant Executive Engineer, Vidyaranyapure Sub-Division. BBMP, Bangalore.

TEST RESULTS:

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **5.07 %**
2. **Gradation Test**:

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-15 of MORTH Specifications-2001 (Grading – 2)
13.2	**100**	100
9.5	**96.30**	90—100
4.75	**42.50**	35—51
2.36	**36.00**	24—39
1.18	**19.40**	15—30
0.3	**15.00**	09—19
0.075	**5.10**	03—08

* As furnished by Client.
The Results relate only to the items tested.

AE-9

Accepted

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Date: 25-03-2015

TABLE 12 :

SL No	Test conducted	Sample No	Results	Requirements as per IS:383-1970 & Test Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2007)
1	Flakiness & Elongation Index	01	**24.30%**	Not more than 30 %
2	Impact Value	----,,----	**23.40 %**	Not more then 24.00 % for BC Not more then 27.00 % for DBM Not more then 30.00 % for BM/WMM
3	Water absorption	----,,----	**0.40%**	Not more than 1.0 %
4	Stripping test. (Coating and stripping of Bitumen aggregate mixtures)	----,,----	**97.20 %**	Minimum retained coating 95.0 %

*As Furnished by Client

The Results relate only to the items tested.

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25/03/2015

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